

## **CIPHERING BETWEEN A CDMA NETWORK AND A GSM NETWORK**

### **ABSTRACT**

Shared secret data is used to authenticate and encrypt between a CDMA network and a GSM network such that a mobile station having a subscription in a GSM network can roam into a CDMA network and be authenticated to use the CDMA network and have messages encrypted without having a CDMA subscription. The goal of authenticating a GSM subscriber in a CDMA network using GSM authentication credentials is achieved by substituting a key  $K_c$  as SSD-A and messages are encrypted substituting  $K_c$  as SSD-B using a CAVE algorithm.